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2,665,833

GREASE AND MOISTURE-PROOF CARTON AND CONTAINER

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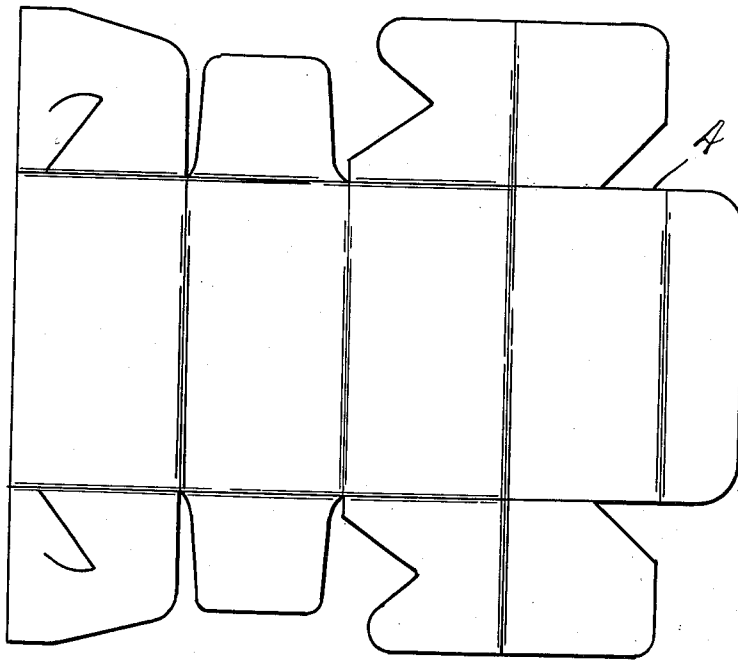


FIG. 1

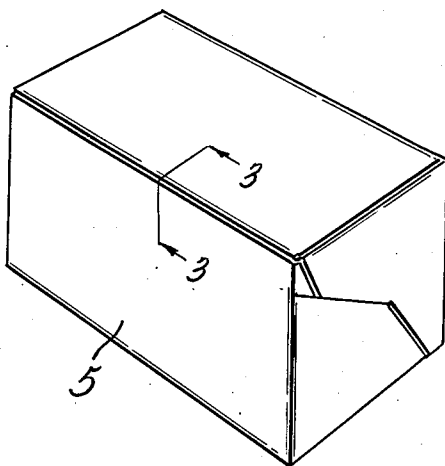


FIG. 2

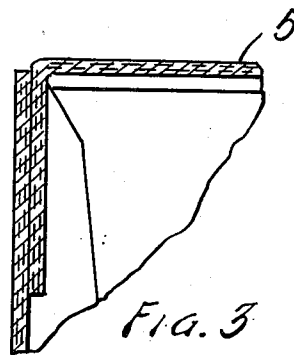


FIG. 3

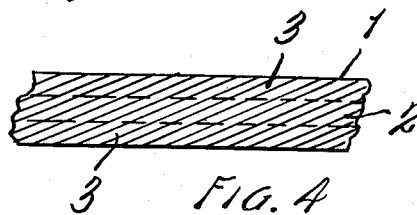


FIG. 4

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GREASE AND MOISTUREPROOF CARTON
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4 Claims. (Cl. 229-3.1)

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This invention relates to improvements in grease and moistureproof cartons and containers.

The main objects of this invention are:

First, to provide a grease and moistureproof carton or container for food products which is highly resistant to grease penetration or absorption and is attractive in appearance inasmuch as it is not discolored by the impregnation thereof with the grease resistant ingredient.

Second, to provide a cut and scored carton which may be readily set up to receive the contents and in which not only the surface of the paperboard from which the carton is formed is grease resistant but also the edges and the scores are resistant to grease penetration or absorption.

Third, to provide a grease resistant carton or container in which the grease resistant agency is of vegetable origin as distinguished from animal or mineral origin.

Fourth, to provide a carton or container having these advantages which may be economically produced.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawings, in which:

Fig. 1 is a plan view of a carton blank embodying my invention.

Fig. 2 is a perspective view of the carton erected.

Fig. 3 is a fragmentary sectional view on line 3-3 of Fig. 2.

Fig. 4 is an enlarged fragmentary sectional view of the paperboard stock.

In the embodiment of my invention illustrated the paperboard stock, designated generally by the numeral 1, comprises a body or center ply 2 of substantial thickness and so-called liner or surface plies 3-3 on the sides thereof. These liner or surface plies contain such a quantity or amount of titanium dioxide as to prevent substantial discoloration when the paperboard is impregnated or substantially saturated with an oil.

In Fig. 1 I illustrate a blank, designated generally by the numeral 4, which is cut and scored to permit its being erected into a carton designated generally by the numeral 5 in Fig. 2. The carton blank as shown in Fig. 1 after cutting and scoring is saturated or impregnated with a deodorized hydrogenated peanut oil or other deodorized hydrogenated vegetable oils such as, for example, cottonseed oil. The cut and scored

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blank is submerged in the melted hydrogenated peanut oil desirably heated to a temperature of approximately 210° F. although this temperature may be considerably varied as the hydrogenated peanut oil employed by the applicant has a melting point of approximately 145° F. and a titer of 136° to 140° F. The submerging of the cut and scored blank results in the scores and the edges of the blank being effectively impregnated so that all parts of the carton are effectively resistant to absorption of a greasy material that may be packaged, such as lard, butter, margarine or the like. While the impregnating hydrogenated peanut oil is fixed within the carton or container board, that is, it does not ooze out or escape or mix with the product that may be packaged, in the event that any portion should become mixed with the product it is not deleterious or objectionable.

The main feature, however, is the very high greaseproofing qualities which is possessed by my material. When the liner contains titanium dioxide in suitable quantity the carton is not discolored by impregnation with the oil. Since the hydrogenated peanut oil is only very slowly soluble in edible fats, a high grease resistance results and the packaged fats cannot penetrate or "wick" into the paperboard which is a common cause of rapid development of rancidity in food products, such as lard, butter and the like.

In the accompanying drawing the scoring indicated is of a type in which the material is partially crushed along the folding lines. The folding lines or scores are sometimes in the form of slits or cuts partially extending through the carton material. In either case the cut or broken edges are impregnated with the impregnating material so that the packaged fats or grease cannot "wick" into the paperboard. The desired condition is, however, to so impregnate the carton blank that "wicking" is eliminated at all points.

The carton illustrated is a conventional type and it will be understood I contemplate the embodiment of my invention in various designs or types of cartons and containers.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. An article of manufacture a carton adapted for packaging of greasy food and food ingredients and formed of lined paperboard substantially impregnated throughout to substantial saturation with hydrogenated peanut oil, the liner containing titanium dioxide in such quantity as to pre-

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vent substantial discoloration when the paperboard is penetrated by the oil.

2. In an article of manufacture a carton adapted for packaging of greasy food and food ingredients and formed of lined paperboard substantially impregnated throughout to substantial saturation with hydrogenated vegetable oil, the liner containing titanium dioxide in an amount preventing substantial discoloration when the paperboard is penetrated by the oil.

3. A grease and moistureproof packaging element for the packaging of greasy food and food ingredients formed of an integral lined paperboard blank saturated with hydrogenated peanut oil, the liner containing titanium dioxide in such quantity as to prevent substantial discoloration of the liner by the saturation of the blank with the oil.

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4. A grease and moistureproof packaging element for the packaging of greasy food and food ingredients formed of a paperboard blank saturated throughout with hydrogenated peanut oil.
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